

37. (Twice Amended) A system for locating the position of a smart card, said system comprising:

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a smart card having the dimensions of a conventional plastic credit card, said smart card comprising a microprocessor, a memory configured for storing geographical position data, and an automated location tracking means, wherein the microprocessor, memory and automated location tracking means are in electrical communication with each other;

a global positioning system satellite in duplex communication with the location tracking means; and

a central processing center in duplex communication with the global positioning system satellite, said central processing center capable of receiving coordinate data transmitted from the global positioning system satellite and determining the location of the smart card.

#### REMARKS

Claims 1-46 have been rejected. Applicants have amended claims 1, 18, 35 and 37. Applicants believe all claims are now in condition for allowance. No new matter was added by way of these amendments. The following comments address the Final Office Action mailed October 25, 2002. Applicants kindly request that the Examiner consider the following remarks in view of the newly cited reference to Iijima U.S. Patent No. 5,615,381.

**Claim Rejections Under- 35 USC § 103**

A. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima (US 5,615,381) in view of Mohan (US 6,121,922, previously cited).

Claim 37 is directed to a system for locating the position of a smart card. Said smart card is to have the dimensions of a conventional plastic credit card and include an automated location tracking means, for instance, a GSM chip and/or transmitter, that is in electrical communication with a microprocessor and a memory, the memory being configured to store geographical position data.

The Office Action asserts that Iijima fails to teach the smart card comprising an automated location tracking means, the automated location tracking means being in electrical communication with the microprocessor and the memory. However, the Office Action asserts that Mohan teaches a system for locating the position of a card (module 100 within enclosure 310), the system comprising: a card comprising a microprocessor (controller/subsystem 300), the microprocessor being in electrical communication with a memory means (the microprocessor is allegedly necessarily in electrical communication with a memory means such as a RAM for storing data/commands to be executed/processed), and a location tracking means (GPS receiver 360 and/or cellular data link and modem 320). Hence, the Office Action asserts that in view of Mohan's teachings, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include with the smart card as taught by Iijima, the smart card comprising an automated location tracking means, the automated location tracking means being in electrical communication with the microprocessor and the memory.

Applicants respectfully traverse on three grounds. First, the Office Action assumes that the module (100) in Mohan is compatible with the dimensions of a conventional plastic credit card. Again, Applicants point out that the conventional plastic credit card is approximately 3 ¼ inches by 2 inches with a thickness of approximately 1/40<sup>th</sup> of an inch. Applicants further point out that in order to have the functionality of the present claimed invention, module 100 requires the following components as shown in Fig. 2: A GPS antenna, a first LID, a first multi-chip module, a second LID, a second multi-chip module, a rechargeable battery, a third multi-chip module, a third LID and a flex cable connecting all three multi-chip modules.

The Office Action asserts that the invention of Mohan is not limited to size, however, Applicants respectfully disagree. Mohan is in fact limited by the size of the required components set forth in the disclosure that are necessary to allow the location system to function in the way required by the present application. Applicants maintain it is physically impossible to fit all of the above required components into a card that is 1/40<sup>th</sup> of an inch thick. Applicants once again point out that Mohan discloses relative dimensions of two inches squared with a thickness of one-half-inch. See column 3, lines 38-41. Furthermore, Applicants point out that the device would have a further increased thickness due to the requirements of an additional memory element not disclosed in Mohan but required by the present application. Hence, given the intended functionality and use to which Applicants seek to put the locating system, primarily: locating, tracking, receiving, transmitting, translating, and storing memory data (especially in relation to global position), the system disclosed in Mohan is not compatible with the dimension limitations as required by the present application.

Second, claim 37 is directed to a system for locating position wherein a microprocessor is in electrical communication with both a memory and location tracking means. Moreover, claim 37 as amended includes a memory configured for storing geographical position data. The Office Action asserts that Mohan teaches a microprocessor that is "necessarily in communication with a memory means such as RAM for storing data/commands to be executed/processed." Applicants have reviewed the disclosure provided in Mohan but can not find therein any reference to any form of memory device. In addition, there is certainly no disclosure, motivation, or suggestion in Mohan to include a memory configured to store geographical position data.

Third, the Office action asserts that it would have been obvious to combine the alleged smart card taught by Iijima with the teachings of Mohan so as to locate a user of the card. Applicants respectfully disagree. Iijima is directed to a portable electronic device that is capable of running two different program functions without either program being able to access specified data portions of the other program. The purpose of this is to allow both a card manufacturer and a card issuer to effectuate the functionality of an IC card without allowing either party to access the other's data. Mohan is directed to a miniaturized geographic position determination and communications module. The purpose of which is to track a person, as in covert actions. These two fields are completely unrelated. Hence, the combination is inappropriate, as held in *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992):

"The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness."

lijima makes no reference to, nor gives any motivation for tracking a person via possession of the IC card disclosed therein. Furthermore, Mohan makes no reference to configuring its device to fit within a "smart card," nor does it provide any motivation for using such in an effort to track someone. Neither inventor recognized the problem of lost or stolen credit cards, a problem appreciated and solved by Applicants, and hence there was no motivation to combine the two references. As the Fed. Cir. held in *Carella v. Starlight Archery*, 804 F.2d 135, 231 USPQ 644 (Fed. Cir. 1986):

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or incentive supporting the combination."

This is especially true, in situations where neither reference acknowledged the problem that was solved by the present inventor. See *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986).

Furthermore, as mentioned above, even if there was a motivation there would not have been a likelihood of success because the components described in Mohan could not be configured in such a way as to meet the claim limitations required in the present application, especially in light of the fact that Mohan fails to provide the requisite memory means. In view of the foregoing, Applicants respectfully assert that claims 37-39 are patentably distinct from prior art cited by the Examiner.

B. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over lijima as modified by Mohan as applied to claim 37 above, and further in view of Gildea et al (US 5,861,841, previously cited). Claims 44-46 depend from claim 37, and

are therefore patentably distinct from the prior art for at the least the same reasons articulated with respect to claim 37.

C. Claims 1-8, 13, 14, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima in view of Grant (US 6,095,416, previously cited) and Mohan.

The Office Action combines the teachings of Iijima with Grant, to derive a multi-functioning smart card capable of storing various data points. The Office Action then takes Official Notice to establish that those various data points are to precisely be a first set of data to access a bank account, a second set of data to access a credit card account, a third set of data representing the identification of the holder of the card, and a final fourth set of data to access a telephone communication services. Then the Office Action combines the teachings of the above, and the Official Notice, with Mohan to derive the above described smart card with the additional feature of having an automated location tracking means for determining a location of the smart card, wherein the location tracking means transmits an identification signal unique to the smart card, which signal is detectable by a global positioning system satellite, wherein the location of the smart card is determined from the signal transmitted by the location tracking means.

First, Applicants note that claim 1 as amended recites a second memory configured for storing geographical position data. None of the cited prior art references teaches or suggests the use of such a memory. Therefore, Applicants respectfully submit that claim 1, and claims 2-8, 13 and 14, which depend from claim 1, are all patentably distinct from the prior art cited by the Examiner. Next, the Office Action asserts that Iijima teaches a smart card capable of performing more than one function and that this

capability is provided by a first and second memory being in electrical communication with one another. Applicants respectfully disagree. As stated above, the purpose behind Iijima is to allow the microprocessor to run one set of program functions using one memory at one time and another using a second memory at a different time. A necessary component of this interconnectedness is the required Supervisory Means without which there would not be the requisite interconnectivity. The present application does not require and/or use such a means to provide interconnectivity. In fact, Iijima actually teaches away from the present invention as the present invention requires the microprocessor to access several of the different data units within the different memory portions at the same time, which is not possible via the teachings of Iijima. Furthermore, Iijima is not compatible with the present invention because it requires not only an additional Supervisory Means, but also because of the way the IC card is set up to function, it requires an additional (third) memory unit not required by the present invention. In light of the foregoing, Iijima cannot be relied upon to render the present invention obvious.

Furthermore, Grant, as well can not be relied upon to render the present application obvious. To allow for a multi-functional magnetic card Grant requires that the card be divided in three segments, each segment requiring an individual key pad as well as a unique PIN number. The present application is not bound by these limitations. Additionally, the Office Action asserts that "conventional magnetic card readers can read data stored with bit spacing at least 10 times smaller than the standard with high accuracy." Applicants would like to point out that the present invention is not directed to magnetic card readers, as described in the Office Action, but to a smart card having a

magnetic strip, and despite the fact that conventional card readers can read 10 times the data of a standard device, Grant is limited by the compression capabilities disclosed therein, which only allow for three times the compression capabilities, a limitation not bound to the present application.

With respect to the Official Notice taken, Applicants respectfully traverse. In order to render a particular invention obvious every element of a claim pertaining thereto must be found either in the prior art or known to one of ordinary skill. Furthermore, the burden is on the Examiner to prove each and every element is so met. See *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1986). The Office Action takes Official Notice that several elements were allegedly known in the art yet not only fails to cite specific instances wherein such elements are set forth, but additionally fails to account for the particular combination set forth in the present claims. For instance, in one embodiment, the present invention pertains to a smart card, which contains the ability to access telephone communication services much akin to the use of a gas card to obtain gas. Conventional telephone cards do not work in this way. Applicants respectfully request that the Examiner cite where in the prior art such a modification is shown. Furthermore, Applicants respectfully request that the Examiner point out where in the prior art such a combination of data elements, as claimed in the present invention, is shown. In light of the foregoing, Applicants respectfully submit that the Official Notice in this instance is improper.

The Office Action further relies on Mohan to render the present Application obvious. As argued above, the system described in Mohan is not applicable to the present invention nor is its combination with Iijima, or any other reference cited herein



proper. Therefore, in light of the following Applicants respectfully request that the rejection be reconsidered and withdrawn.

Next, regarding claims 35 and 36; claim 35 as amended recites a second memory configured for storing geographical position data. None of the prior art references teaches the use of such a memory. In addition, the combination of Iijima, Mohan and Grant is improper and does not render claims 35 and 36 obvious. In light of the arguments recited above Applicants respectfully request the rejection be reconsidered and withdrawn.

D. Further rejection of claims dependent on claim 1 under 35 U.S.C. 103(a)

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant and Mohan in view of the admitted prior art. Claim 11 is rejected as being unpatentable over Iijima as modified by Grant and Mohan as applied to claim 1 above, and further in view of Pitroda. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant and Mohan, as applied to claim 1 above, and further in view of Gildea et al. Claim 15 is rejected as being unpatentable over Iijima as modified by Grant and Mohan as applied to claim 1 above, and further in view of Obradovich et al. Claims 16 and 17 are rejected as being unpatentable over Iijima as modified by Grant and Mohan as applied to claim 8 above, which depends on claim 1, and further in view of Powers. These claims all depend from claim 1 and are patently distinct from the prior art for at least the same reasons articulated above with respect to claim 1.

E. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant and Mohan in view of Chapin, Jr. (US 5,883,377, previously cited).

Claim 18 as amended recites a memory configured for storing geographical position data. None of the prior art references teaches or suggests the use of such a memory. Therefore, claim 18, and claims 19-25, which depend from claim 18, are all patentability distinct from the prior art references cited by the Examiner.

In addition, the Office Action asserts that Iijima as modified by Grant and Mohan fails to teach the smart card comprising a second magnetic strip comprising a third set of data, wherein the second magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from the other of the proximal and distal ends. However, the Office Action alleges that Chapin, Jr. teaches a card having a proximal end and a distal end, the card comprising a first magnetic strip comprising a first set of data, and a second magnetic strip comprising a third set of data, wherein the magnetic strip can only be read by a credit card reader when the smart card is inserted into the credit card reader from one of the proximal and distal ends.

As recited above, neither Iijima nor Grant nor Mohan may be used, either independently or in combination, to provide a smart card, having the dimensions of a conventional plastic credit card, with a magnetic strip having a first and second data, a second magnetic strip having a third and fourth set of data, an integrated microprocessor in electrical communication with a memory and a tracking device. Hence, as argued above, the use of these references in combination with Chapin, Jr., to render the

invention of claim 18 obvious, is improper. In light of the foregoing Applicants respectfully request that the rejection be reconsidered and withdrawn.

F. Further rejection of claims dependent on claim 18 under 35 U.S.C. 103(a)

Claims 19-26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Grant et al, Mohan, and Chapin, Jr. as applied to claim 18 above, and further in view of the admitted prior art. Claims 28-31 are rejected as being unpatentable over Iijima as modified by Grant et al, Mohan, and Chapin, Jr. as applied to claim 18 above, and further in view of Gildea et al. Claim 32 is rejected as being unpatentable over Iijima as modified by Grant et al, Mohan, Chapin, Jr., and Gildea et al as applied to claim 28 above, which depends on claim 18, and further in view of Obradovich et al. Claims 33 and 34 are rejected as being unpatentable over Iijima as modified by Grant et al, Mohan, Chapin, Jr., and the admitted prior art as applied to claim 26 above, which is dependent on claim 18, and further in view of Powers. These claims all depend from claim 18 and are patently distinct from the prior art for at least the same reasons articulated above with respect to claim 18.

G. Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as modified by Mohan in view of Gildea et al.

Claim 40 is directed to a system for converting currency values. The system includes a smart card (having the dimensions of a conventional plastic credit card), a microprocessor in communication with a memory, a location tracking means and a conversion program. Claims 41-43 depend from claim 40. As recited above, neither

lijima nor Mohan are applicable to the present invention and their combination is improper. In light of the foregoing, Applicants respectfully request that the rejection be reconsidered and withdrawn.

Attached hereto is a marked-up version of the changes made to the claims. The attached page is captioned "**Version with Markings to Show Changes Made.**"

**Conclusion**

For all the foregoing reasons, Applicants respectfully assert that the claims are in a condition for allowance. A favorable action on the merits of the claims is therefore earnestly solicited. If any minor issues remain, please contact Applicants' undersigned representative at (858) 552-8400.

Respectfully submitted,

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**Version With Markings to Show Changes Made**

1. (Twice Amended) A smart card capable of performing more than one function, said smart card having the dimensions of a conventional plastic credit card and comprising:

a first memory comprising a first set of data to access a bank account, a second set of data to access a credit card account, a third set of data representing the identification of a holder of the smart card, and a fourth set of data to access telephone communication services;

a microprocessor, said microprocessor being in electrical communication with a second memory[;], said second memory configured for storing geographical position data; and

an automated location tracking means for determining a location of the smart card.

18. (Twice Amended) A smart card having the dimensions of a conventional plastic credit card and having a proximal end and a distal end, said smart card comprising:

a first magnetic strip comprising a first set of data and a second set of data;

a second magnetic strip comprising a third set of data and a fourth set of data;

an integrated circuit embedded in said smart card, said integrated circuit comprising a

microprocessor in electrical communication with a memory[;], said second memory configured for storing geographical position data; and

a tracking device capable of transmitting a signal unique to the smart card.

35. (Twice Amended) A method of gaining access through an access device upon payment of a value, the method comprising the steps of:

providing a smart card having the dimensions of a conventional plastic credit card, said smart card comprising:

a first memory comprising a first set of data to access a bank account, a second set of data to access a credit card account, a third set of data representing the identification of a holder of the smart card, and a fourth set of data to access telephone communication services;

a microprocessor, said microprocessor being in electrical communication with a second memory[:], said second memory configured for storing geographical position data; and

an automated location tracking means for determining a location of the smart card;

inserting the smart card into the access device, wherein the access device is shaped to receive a smart card having the dimensions of a conventional plastic credit card;

reading at least one of said four sets of data;

performing a first authentication process on said at least one set of data; and

permitting access if said step of performing a first authentication process meets a required condition.

37. (Twice Amended) A system for locating the position of a smart card, said system comprising:

a smart card having the dimensions of a conventional plastic credit card, said smart card comprising a microprocessor, a memory configured for storing geographical position data, and an automated location tracking means, wherein the microprocessor, memory and automated location tracking means are in electrical communication with each other;

a global positioning system satellite in duplex communication with the location tracking means; and

a central processing center in duplex communication with the global positioning system satellite, said central processing center capable of receiving coordinate data transmitted from the global positioning system satellite and determining the location of the smart card.